



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY TITLE V PERMIT

COMPANY: *El Paso Natural Gas Company*
FACILITY: *Wenden Compressor Station*
PERMIT #: *1000159*
DATE ISSUED: *DRAFT*
EXPIRY DATE:

SUMMARY

This operating permit is issued to El Paso Natural Gas Company (EPNG), the Permittee, for operation of their Wenden Compressor Station located in La Paz County 33 miles west of Tonopah, Arizona and 3 miles south of I-10 mile marker 63.

EPNG provides natural gas transportation services for natural gas suppliers and end users throughout the southwestern United States, and owns and operates a large natural gas pipeline network. The Wenden compressor station is one of several such stations that provide natural gas compression to the pipeline network. Compression is needed to maintain enough pressure in the pipeline to keep the natural gas flowing, and is accomplished at Wenden by **one 8500 hp General Electric Frame 3 M3102 F regenerative natural gas-fired turbine and one 4500 hp Solar Centaur H natural gas-fired simple cycle turbine engine** each driving a compressor unit. Primary electric power for the facility is purchased. An electric generator attached to the GE turbine generates electric power during operation. During emergency conditions, a Wakesha auxiliary engine is operated. A low Nitrogen Oxides (NO_x) combustor has been installed on the Solar Centaur H simple cycle turbine engine. The facility is permitted to operate 24 hours a day, 365 days a year. This facility is normally an unattended location. All records relating to this permit will be kept at the EPNG's Ehrenberg District Office, Colorado River Road, Ehrenberg, Arizona 85334.

All terms and conditions are enforceable by the Administrator of the United States Environmental Protection Agency (U.S. EPA). This permit cites only the current state rules. The rules in the applicable State Implementation Plan (SIP) have been renumbered but the language in the current rules is either more stringent or is the same. Only Rule R9-3-527.C. has been included in this permit from the applicable SIP because this rule was substantially different. A copy of a rule conformity test between the current rules and the applicable SIP is attached to the technical analysis.

Table 1 summarizes the requirements for operation of equipment emitting emissions in significant quantities. Activities generating insignificant quantities of air emissions for which they are no applicable requirements are listed in Attachment "E". The total estimated potential emissions emitted from this facility (excluding insignificant activities) are as follows. These figures are for information purposes only and not an enforceable limit.

<i>Pollutants</i>	Nitro- gen Oxides	Carbon Monoxide	Volatile Organic Compounds	Formalde- hyde	Sulfur Dioxide	Particulate Matter
Emissions (Tons Per Year)	338.12	198.04	12.94	5.03	0.247	4.37

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TABLE 1 : Summary of Permit Requirements

Emission Unit	Pollutants Emitted	Control Measure	Emission Limits / Standards	Monitoring/ Record Keeping	Reporting ⁽¹⁾	Testing Frequency / Methods
<u>POINT SOURCES</u> P1. General Electric M3102 F regenerative gas turbine engine Stack 1 [R18-2-719]	PM	No controls installed	$E = 1.02 Q^{0.769}$ lb/hr	Daily lower heating value (LHV) of fuel OR Copy or FERC-approved Tariff agreement where LHV \geq 967 Btu/ft ³	Any change in Tariff agreement relating to lower heating value w- ithin 30 days	--
	SO ₂	No controls installed	Sulfur - <0.8% Fuel - Only pipe- line quality natu- ral gas	Daily sulfur content of fuel, OR Maintain copy of FERC-approved Tariff agreement where total sulfur <0.017 wt (5 grains/100 scf)	Any daily period when sulfur >0.8% OR Any change in Tariff agreement within 30 days relating to sulfur content and lower heating value of fuel within 30 days	--
	NOx, CO, VOC, HAPs	No controls installed	**	Dates of turbine operation until the required performance testing is triggered	-Semi-annual reports of dates of operation of each turbine until the performance test is triggered -Status of testing requirement until the performance test is completed	One time within 6 months of permit expiration after a tur- bine has been operated for 15 cumulative days for NOx and CO only Methods 10, 20
	Opacity	No controls installed	<40% for any period>10 con- secutive seconds	--	--	--
P2. Solar Centaur H natural gas fired simple cycle gas turbine Stack 2 [40 CFR 60, Subpart GG]	NOx	SoLoNox combustors	STD= $0.015 * \frac{(14.4)}{Y} + F$	Daily nitrogen content of fuel (Requirement waived by EPA)	--	Annual test for emissions of NOx
	SO ₂	No controls in- stalled	Sulfur - <0.8% Fuel - Only pipe- line quality natu- ral gas	Daily sulfur content and lower heating value of fuel, OR Maintain copy of FERC-approved Tariff agreement	Any change in Tariff agreement within 30 days relating to sulfur content and lower heating value of fuel within 30 days	
	CO, VOC, PM, HAPs	No controls in- stalled	**	--	--	--
<u>FUGITIVE SOURCES</u> <u>F1. Non-Point Sources</u>						
a. Driveways, Parking areas, Vacant Lot [A.A.C.R18-2-604.A]	Opacity	Gravel	< 40%	Maintain gravel, dates gravel added	--	--
b. Unused Open Areas [A.A.C.R18-2-604.A]	Opacity	Native vegetation	< 40%	Monthly status of unused open ar- eas, dates fresh vegetation added	--	--
c. Open Areas (repair construction, etc.) [A.A.C.R18-2-604.A]	Opacity	Dust suppressant, wetting agent	< 40%	Date and type of activity per- formed, type of controls used	--	--

Emission Unit	Pollutants Emitted	Control Measure	Emission Limits / Standards	Monitoring /RECORD KEEP- ING	Reporting	Testing / Methods
d. Roadways (repair construction, etc.) [A.A.C.R18-2-605.A]	Opacity	Dust suppressants, wetting agents	< 40%	Date and type of activity performed, type of controls used	--	--
e. Material transportation [A.A.C.R18-2-605.B]	Opacity	Covering, wetting agents, dust suppressants	< 40%	Date and type of activity performed, type of controls used	--	--
f. Material Handling [A.A.C.R18-2-606]	Opacity	Dust suppressants, wetting agents	< 40%	Date and type of activity performed, type of controls used	--	--
g. Storage piles [A.A.C.R18-2-607.A]	Opacity	Covering, dust suppressants, wetting agents	< 40%	Date and type of activity performed, type of controls used	--	--
h. Stacking and reclaiming machinery at storage piles [A.A.C.R18-2-607.B]	Opacity	Minimum fall, dust suppressants, wetting agents	<40%	Date and type of activity performed, type of controls used	--	--
I. Roadway and Site Cleaning [A.A.C.R18-2-607.B]	Opacity	Dust suppressants, wetting agents	< 40%	Date and type of activity performed, type of controls used		
<u>F2. Abrasive Blasting</u> [R18-2-726, 702.B]	Opacity	Wet blasting, use of enclosures	<40%	Date, duration of project, type of control measures used	--	--
<u>F3. Spray Painting</u> [R18-2-702.B, 727, Applicable SIP R9-3-527.C]	VOC	Enclosures	96% capture, except for architectural or spot painting, dispose <1.5 gallons	Date, duration of project, control measures used, MSDS of paints used	--	--
	Opacity	Enclosures	< 40%	Date, duration of project. Control measures used		
<u>F4. Mobile Sources</u> a. Off Road Machinery [A.A.C.R18-2-802]	Opacity	--	<40% for any period>10 consecutive seconds	Record of all off-road machinery maintenance	--	--
b. Roadway and Site cleaning machinery [A.A.C.R18-2-804]	Opacity	--	<40% for any period>10 consecutive seconds	Record of all roadway and site cleaning machinery maintenance	--	--
<u>F5. Demolition/ Renovation</u> [R18-2-1-101.A.8]	Asbestos	As required by rule	As required by rule	Relevant paperwork on file	--	--

Note: HAPs are emitted in trace quantities

** : No limits are established

-- : Not required

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⁽¹⁾ Semiannual Compliance Certifications required for all emissions units.

ATTACHMENT "A": GENERAL PROVISIONS

Air Quality Control Permit No. Permit No. 1000159

For

EL PASO NATURAL GAS COMPANY - Wenden Compressor Station

I. PERMIT EXPIRATION AND RENEWAL [A.R.S. § 49-426.F, A.A.C. R18-2-304.C.2 and 306.A.1]

- A. This permit is valid for a period of five years from the date of issuance of the permit.
- B. The Permittee shall submit an application for renewal of this permit at least 6 months, but not more than 18 months prior to the date of permit expiration.

II. COMPLIANCE WITH PERMIT CONDITIONS [A.A.C. R18-2-306.A.8]

- A. The Permittee shall comply with all conditions of this permit including all applicable requirements of Arizona air quality statutes and the air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.
- B. Need to halt or reduce activity not a defense. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE [A.A.C. R18-2-306.A.8.c, 321]

- A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination; or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- B. The permit shall be reopened and revised under any of the following circumstances:
 - 1. Additional applicable requirements under the Act become applicable to the Class I source. Such reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to R18-2-322(B). Any permit revision required pursuant to this subparagraph shall comply with provisions in R18-2-322 for permit renewal and shall reset the five year permit term.
 - 2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit.

3. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
4. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.
5. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under paragraph 1 above, affect only those parts of the permit for which cause to reopen exists. Such reopenings shall be made as expeditiously as practicable.

IV. POSTING OF PERMIT

[A.A.C. R18-2-315]

- A. Permittee shall post such permit, or a certificate of permit issuance on location where the equipment is installed in such a manner as to be clearly visible and accessible. All equipment covered by the permit shall be clearly marked with one of the following:
 1. Current permit number.
 2. Serial number or other equipment number that is also listed in the permit to identify that piece of equipment.
- B. A copy of the complete permit shall be kept on the site.

V. FEE PAYMENT

[A.A.C. R18-2-326; 306.A.9.]

Permittee shall pay fees to the Director pursuant to A.R.S. § 49-426(E) and A.A.C. R18-2-326.

VI. ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE

[A.A.C. R18-2-327]

- A. Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31 or ninety days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.
- B. The questionnaire shall be on a form provided by the Director and shall include the information required by A.A.C. R18-2-327.

VII. COMPLIANCE CERTIFICATION

[A.A.C. R18-2-309.2.c, 306.A.5]

- A. Permittee shall submit a compliance certification to the Director twice each year, which describes the compliance status of the source with respect to each permit condition. The first certification shall be submitted no later than April 15th, and shall report the compliance status of the source during the period between September 16th of the previous year, and March 15th of the current year. The second certification shall be submitted no later than October 15th, and shall report the compliance status of the source during the period between March 16th and September 15th of the current year.

The compliance certifications shall include the following:

1. Identification of each term or condition of the permit that is the basis of the certification;
2. Compliance status of each applicable requirement;
3. Whether compliance was continuous or intermittent;
4. Method(s) used for determining the compliance status of the source, currently and over the reporting period;
5. All instances of deviations from permit requirements reported pursuant to Section XI.B of this Attachment; and
6. A progress report on all outstanding compliance schedules submitted pursuant to Section XI.C of this Attachment.

B. A copy of all compliance certification for Class I permits shall also be submitted to the EPA Administrator.

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS [A.A.C. R18-2-309.3]

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this part shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

IX. INSPECTION AND ENTRY [A.A.C. R18-2-309.4]

The Permittee shall allow the Director or the authorized representative of the Director upon presentation of proper credentials to:

- A. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- E. Record any inspection by use of written, electronic, magnetic and photographic media.

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD

[A.A.C. R18-2-304.C]

If this source becomes subject to a standard promulgated by the Administrator pursuant to section 112(d) of the Act, then the Permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

XI. PERMIT DEVIATION REPORTING

A. EXCESS EMISSIONS REPORTING

[A.A.C. R18-2-306.A.5.b, 306.E.3.d and 310]

1. Emissions in excess of an applicable emission limitation contained in Section I of Attachment "B", of this permit shall constitute a violation. For all situations that constitute an emergency as defined in R18-2-306(E), the affirmative defense and reporting requirements contained in that provision shall apply.
2. It shall be the burden of the Permittee to demonstrate, through submission of the data and information required by this section, that all reasonable and practicable measures within the Permittee's control were implemented to prevent the occurrence of excess emissions.
3. Excess emissions shall be reported as follows:
 - a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:
 - (1) Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions including all available information from paragraph b. of this subsection.
 - (2) Detailed written notification within 72 hours of the notification pursuant to subparagraph (1) of this paragraph.
 - b. Report shall contain the following information:
 - (1) Identity of each stack or other emission point where the excess emissions occurred.
 - (2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions.
 - (3) Date, time and duration or expected duration of the excess emissions.
 - (4) Identity of the equipment from which the excess emissions emanated.
 - (5) Nature and cause of such emissions.

- (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions.
 - (7) Steps taken to limit the excess emissions. If the source's permit contains procedures governing source operation during periods of start-up or malfunction and the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures.
- 4. In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to subsection A.3.a.(2) of this Section.
- 5. **EMERGENCY PROVISION** [A.A.C. R18-2-306.E]
 - a. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
 - b. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of paragraph d of this section are met.
 - c. The Permittee shall submit notice of the emergency to the Director by certified mail, facsimile or hand delivery within 2 working days of the time when emission limitations were exceeded due to an emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.
 - d. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An emergency occurred and that the Permittee can identify the cause(s) of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - (4) The notice was submitted per paragraph c. above.

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- e. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- f. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

B. OTHER PERMIT DEVIATIONS

[A.A.C. R18-2-306.A.5 and 6, 306.E.3.d.]

Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Prompt reporting shall mean that the report was submitted to the Director by certified mail, facsimile, or hand delivery within two working days of the time the deviation occurred.

C. COMPLIANCE SCHEDULE

For any episode of non-compliance that is reported pursuant to XI.A and XI.B above, and that cannot be corrected within 72 hours, the Permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated.

XII. RECORD KEEPING REQUIREMENTS

[A.A.C. R18-2-306.A.4]

- A. Permittee shall keep records of all required monitoring information including, but not limited to, the following:
 - 1. The date, place as defined in the permit, and time of sampling or measurements;
 - 2. The date(s) analyses were performed;
 - 3. The name of the company or entity that performed the analyses;
 - 4. A description of the analytical techniques or methods used;
 - 5. The results of such analyses; and
 - 6. The operating conditions as existing at the time of sampling or measurement.
- B. Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

XIII. REPORTING REQUIREMENTS

[A.A.C. R18-2-306.A.5.a]

Permittee shall submit reports of any required reporting as specified in Attachment "B" of this permit.

XIV. DUTY TO PROVIDE INFORMATION

[A.A.C. R18-2-304.G and 306.A.8.e]

- A. The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.
- B. If the Permittee has failed to submit any relevant facts or if the Permittee has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

XV. PERMIT AMENDMENT OR REVISION

[A.A.C. R18-2-318, 319 and 320]

Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVI, as follows:

- A. Administrative Permit Amendment (A.A.C. R18-2-318);
- B. Minor Permit Revision (A.A.C. R18-2-319);
- C. Significant Permit Revision (A.A.C. R18-2-320).

The applicability and requirements for such action are defined in the above referenced regulations.

XVI. FACILITY CHANGE WITHOUT PERMIT REVISION

[AAC R18-2-317]

- A. Permittee may make changes at the permitted source without a permit revision if all of the following apply:
 - 1. The changes are not modifications under any provision of Title I of the Act or under A.R.S. § 49-401.01(17).
 - 2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions.
 - 3. The changes do not violate any applicable requirements or trigger any additional applicable requirements.
 - 4. The changes satisfy all requirements for a minor permit revision under R18-2-319(A).
 - 5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

B. The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of subsections (A) and (C) of this Section.

C. For each such change under subsections A and B of this Section, a written notice by certified mail or hand delivery shall be received by the Director and, for Class I permits, the Administrator, a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change but must be provided as far in advance of the change as possible or, if advance notification is not practicable, as soon after the change as possible. Changes that meet the criteria listed in subsections A, B, and C.1. of this Section are exempt from the notification requirements.

1. Examples of changes that do not require notification:

- a. Changes that are not physical changes or changes in the method of operation of a source and that do not have the potential to affect emissions of regulated air pollutants;
- b. Routine maintenance activities; and
- c. Changes to activities that are insignificant under A.A.C. R18-2-101.54 or as listed as trivial by the Administrator or the Director.

2. Each notification shall include:

- a. When the proposed change will occur.
- b. A description of each such change.
- c. Any change in emissions of regulated air pollutants.
- d. The pollutants emitted subject to the emissions trade, if any.
- e. The provisions in the implementation plan that provide for the emissions trade with which the source will comply and any other information as may be required by the provisions in the implementation plan authorizing the trade.
- f. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply.
- g. Any permit term or condition that is no longer applicable as a result of the change.

XVII. TESTING REQUIREMENTS

[A.A.C.R18-2-312]

A. Production Rates

Tests shall be conducted during operation at the normal rated capacity of each unit, while operating at representative operational conditions unless other conditions are required by the applicable test

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method or in this permit. With prior written approval from the Director, testing may be performed at a lower rate.

B. Operational Conditions During Testing

Performance tests shall reflect representative operational conditions of the plant. Operations during start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions.

C. Test Plan

At least 14 calendar days prior to performing a test, the owner or operator shall submit a test plan to the Director, in accordance with A.A.C. R18-2-312.B and the Arizona Testing Manual. This test plan must include the following:

1. test duration;
2. test location(s);
3. test method(s); and
4. source operation and other parameters that may affect test results.

D. Stack Sampling Facilities

Permittee shall provide or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to the facility;
2. Safe sampling platforms;
3. Safe access to sampling platforms; and
4. Utilities for sampling and testing equipment.

E. Interpretation of Final Results

Each performance test shall consist of three separate runs using the required test method. Each run shall be conducted in accordance with the applicable standard and test method. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. If a sample is accidentally lost or conditions occur which are not under the Permittee's control and which may invalidate the run, compliance may, upon the Director's approval, be determined using the arithmetic mean of the other two runs.

F. Report of Final Test Results

A written report of the results of all performance tests shall be submitted to the Director within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

G. Cessation of Testing After the First Run has Started

If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes, forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions or other conditions beyond the Permittee's control. Termination of any test

without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation which demonstrates good cause must be submitted.

XVIII. PROPERTY RIGHTS

[A.A.C. R18-2-306.A.8.d]

This permit does not convey any property rights of any sort, or any exclusive privilege.

XIX. SEVERABILITY CLAUSE

[A.A.C. R18-2-306.A.7]

The provisions of this permit are severable. If any provision of this permit is held invalid, the remainder of this permit shall not be affected thereby.

XX. PERMIT SHIELD

[A.A.C. R18-2-325]

Compliance with the conditions of this permit shall be deemed compliance with any applicable requirement as of the date of permit issuance.

ATTACHMENT "B": SPECIFIC CONDITIONS

Air Quality Control Permit No. 1000159

For

El Paso Natural Gas Company - Wenden Compressor Station

I. EMISSION LIMITS/STANDARDS

A. General Electric Frame 3 Regenerative Gas Turbine Engine

1. Particulate Matter Standard

[A.A.C. R18-2-719.C, 719.C.1]

Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from this stationary gas turbine engine, having a heat input rate of 4200 million Btu per hour or less, in excess of the amount calculated by the following equation:

$$E = 1.02 Q^{0.769} \quad \text{where:}$$

E = the maximum allowable particulate emissions rate in pounds-mass per hour

Q = the heat input in million BTU per hour.

2. Opacity Limitation

[A.A.C. R18-2-719.E]

Permittee shall not cause, allow or permit to be emitted into the atmosphere from this stationary gas turbine engine, smoke for any period of time greater than ten consecutive seconds which exceeds 40 percent opacity, measured in accordance with the Arizona Testing Manual, Reference Method 9. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes.

3. Fuel Limitation

[A.A.C. R18-2-306.A.2]

Permittee shall only burn pipeline quality natural gas in this stationary gas turbine engine.

4. Sulfur Content Standard [A.A.C. R18-2-719.J]

The sulfur content of the fuel shall not exceed 0.8 percent by weight.
[This is a material permit condition]

B. Solar Centaur H Simple Cycle Gas Turbine Engine

1. Permittee shall operate the dry low NO_x (DLN) combustor according to the manufacturer's specifications which results in meeting the emission limits stated in this permit, recognizing the exceptions allowed under 40 CFR 60.8, A.R.S. 49-464(Q), A.A.C. R18-2-306(E), and A.A.C. R18-2-310.
[This is a material permit condition] [A.A.C. R18-2-306.A.2]

2. Nitrogen Oxide Standard [40 CFR 60.332(a)(2)]

Permittee shall not cause to be discharged into the atmosphere from the stack of this stationary gas turbine engine, any gases which contain **nitrogen oxide** in excess of that calculated from the following equation:

$$STD = 0.0150 * \frac{(14.4)}{Y} + F$$

where: STD= allowable NO_x emissions (percent by volume at 15 percent oxygen and on a dry basis)

Y= manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour

F= NO_x emission allowance for fuel-bound nitrogen as defined in 40 CFR 60.332(a)(3).

3. Sulfur Content Standard [40 CFR 60.333(b)]

Permittee shall not burn in this Solar Centaure gas turbine engine any fuel which contains sulfur in excess of 0.8% by weight.
[This is a material permit condition]

4. Fuel Limitation [A.A.C. R18-2-306.A.2]

Permittee shall only burn pipeline quality natural gas in this Solar Centaur gas turbine engine.

C. Non-Point Sources

1. *Open Areas, Roadways & Streets & Material Handling*

- a. Permittee shall not cause, allow or permit visible emissions from open areas, roadways and streets, storage piles or material handling in excess of 40 % opacity as measured by EPA Reference Method 9. [A.A.C.R18-2-610]

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- b. Permittee shall employ the following methods to prevent excessive amounts of particulate matter from becoming airborne:
- (1) Continue to maintain gravel on driveways, parking areas, and vacant lots where motor vehicular activity occurs; [A.A.C.R18-2-604.A]
 - (2) Maintain native vegetation on any unused open areas within the property line; [A.A.C.R18-2-604.A]
 - (3) Use adequate dust suppressants or wetting agents on open areas during construction operations, repair operations, demolition activities, clearing operations, and leveling operations, or when any earth is moved or excavated; [A.A.C.R18-2-604.A]
 - (4) Use adequate dust suppressants or wetting agents when a roadway is repaired, constructed, or reconstructed; [A.A.C.R18-2-605.A]
 - (5) Use dust suppressants, wetting agents, or cover the load adequately when transporting material likely to give rise to airborne dust; [A.A.C.R18-2-605.B]
 - (6) Use spray bars, wetting agents or dust suppressants when crushing, handling, transporting, or conveying material that is likely to give rise to airborne dust; [A.A.C.R18-2-606]
 - (7) Adequately cover, or use wetting agents or dust suppressants when stacking, piling, or otherwise storing organic or inorganic dust producing material; and [A.A.C.R18-2-607.A]
 - (8) Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material and with the use of spray bars and wetting agents. [A.A.C.R18-2-607.B]
 - (9) Cleaning of any site, roadway, or alley without first applying dust suppressants or wetting agents. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means. [A.A.C.R18-2-804.B]

2. *Open Burning* [A.A.C.R18-2-602]

The Permittee shall not conduct open burning except when permitted to do so by either ADEQ or the local officer delegated the authority for issuance of open burning permits.

D. Other Periodic Activities

1. *Abrasive Blasting* [A.A.C.R18-2-726]

- a. The permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices are:

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- (1) wet blasting; or
 - (2) effective enclosures with necessary dust collecting equipment.
- b. Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting in excess of 40% as measured by EPA Reference Method 9.

[A.A.C.R18-2-702.B]

2. *Use of Paints*

While performing spray painting operations, Permittee shall comply with the following requirements:

- a. Permittee shall conduct or cause to be conducted spray painting operations within an enclosed area equipped with controls containing no less than 96 percent of the over spray in order to minimize organic solvent emissions. Architectural coating and spot painting shall be exempted from this requirement.

[A.A.C.R18-2-727.A]

- b. Permittee or his designated contractor shall not either:

- (1) Employ, apply, evaporate or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or
- (2) Thin or dilute any architectural coating with a photochemically reactive solvent.

[A.A.C.R18-2-727.B]

- c. For the purposes of parts b. and e. of this condition, a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in paragraphs (1) through (3) of this subsection, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

- (1) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation - hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones : five percent
- (2) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: eight percent
- (3) A combination of ethylbenzene, ketones having branched structures, trichloroethylene or toluene: 20 percent

[A.A.C.R18-2-727.C]

- d. Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups or organic compounds described in subsection c(1) through c(3) of this condition, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.

[A.A.C.R18-2-727.D]

- e. Permittee shall not dispose by evaporation more than 1.5 gallons of photochemically reactive solvent in any one day.

[SIP Provision R9-3-527.C]

- f. Visible emissions from spray painting operations shall not have an opacity greater than 40%, as measured by EPA Reference Method 9.

[A.A.C.R18-2-702.B]

3. Mobile Sources

a. Classification

The requirements of this condition are applicable to mobile sources which either move while emitting air contaminants or are frequently moved during the course of their utilization but are not classified as motor vehicles, agricultural vehicles, or are agricultural equipment used in normal farm operations. [A.A.C.R18-2-801]

b. Off-road Machinery

Permittee shall not cause, allow, or permit to be emitted into the atmosphere from any off-road machinery, smoke for any period greater than ten consecutive seconds, the opacity of which exceeds 40 percent. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. Off-road machinery shall include trucks, graders, scrapers, rollers, locomotives and other construction and mining machinery not normally driven on a completed public roadway. [A.A.C.R18-2-802]

c. Roadway and Site Cleaning Machinery

Permittee shall not cause, allow or permit to be emitted into the atmosphere from any roadway and site cleaning machinery smoke or dust for any period greater than ten consecutive seconds, the opacity of which exceeds 40 percent. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. [A.A.C.R18-2-804]

4. Demolition/Renovation

Permittee shall comply with all of the requirements of 40CFR 61, Subpart M (National Emissions Standards for Hazardous Air Pollutants - Asbestos). [A.A.C.R18-2-1101.A.8]

II. MONITORING/RECORD KEEPING REQUIREMENTS

A. General Electric Frame 3 Regenerative Natural Gas Turbine Engine

1. Permittee shall monitor daily, the sulfur content and the lower heating value of the fuel in being combusted in this gas turbine. This requirement may be complied with by maintaining a copy of that part of the FERC-approved Tariff agreement that limits transmission of pipeline quality natural gas of sulfur content less than 0.8 percent by weight and having a heating value greater than or equal to 967 BTU/ft³.
2. Permittee shall record the dates of operation for the GE Frame 3 regenerative natural gas turbine.

This information shall be recorded until such time when the fifteen cumulative days are triggered for conducting the performance test.

B. Solar Centaur H Simple Cycle Natural Gas Turbine Engine

[40 CFR 60.334(b), 40 CFR 60.335(e)]

1. Permittee shall monitor daily, the sulfur content of the fuel being combusted in this gas turbine engine. This requirement may be complied with by maintaining a copy of the FERC-approved Tariff agreement that limits transmission pipeline quality natural gas of sulfur content less than 0.8 percent by weight and having a heating value greater than or equal to 967 BTU/ft³.
2. Permittee shall monitor daily, the nitrogen content of the fuel being fired in this turbine. The requirement to monitor the fuel nitrogen content has been waived as per EPA Memorandum *Authority for Approval of Custom Fuel Monitoring Schedules Under NSPS Subpart GG*, August 14, 1987. Number 1 of the enclosure states:

“Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the gas turbine.”

C. Non-Point Sources

1. *Open Areas, Roadways & Streets, Storage Piles and Material Handling*

Permittee shall maintain records of the following:

- a. Dates gravel maintenance activities were performed in order to comply with the requirements of I.C.1.b.(1)
- b. Dates on which fresh vegetation was introduced as required.
- c. Dates on which any of the activities listed in I.C.1.b(3) were performed, and control measures adopted.
- d. Dates on which any of the activities listed in I.C.1.b(4) were performed, and control measures adopted.
- e. Dates on which any of the activities listed in I.C.1.b(5) were performed, and control measures adopted.
- f. Dates on which any of the activities listed in I.C.1.b(6) were performed, and control measures adopted.
- g. Dates on which any of the activities listed in I.C.1.b(7) were performed, and control measures adopted.
- h. Dates on which any of the activities listed in I.C.1.b(8) were performed, and control measures adopted.
- i. Dates on which any of the activities listed in I.C.1.b(9) were performed, and control measures adopted.

D. Other Periodic Activities

1. *Abrasive Blasting*

Each time an abrasive blasting project is conducted, the Permittee shall log in ink or an electronic format, a record of the following:

2. *Use of Paints*

a. Each time a spray painting project is conducted, the Permittee shall log in ink, a record of the following:

- (1) The date the project was conducted
- (2) The duration of the project
- (3) Type of control measures employed
- (4) Material Safety Data Sheets for all paints and solvents used in the project

b. Architectural coating and spot painting shall be exempt from the RECORD KEEPING requirements of part a. above.

3. *Mobile Sources*

The Permittee shall keep a record of all emissions related maintenance activities performed on mobile sources as per manufactures specifications.

4. *Demolition/Renovation*

As a means of demonstrating compliance with condition I.C.4 of this attachment, the Permittee shall keep a record of al relevant paperwork on file. The relevant paperwork shall include but not be limited to the "NESHAP Notification for Renovation and Demolition Activities" form, and all supporting documents.

E. Location of Records

Permittee may retain all records relating to this permit and a copy of the permit at the Ehrenberg District Office, Colorado River Road, Ehrenberg, Arizona 85334. The Permittee shall comply with the permit posting requirements of Attachment "A", Section IV. Records shall be maintained in accordance with the requirements of Section XII.B of Attachment "A".

III. REPORTING REQUIREMENTS

A. Permittee shall notify the Director in writing within 30 days of any changes to the FERC-approved Tariff agreement relating to the fuel sulfur content and lower heating value limits that occur during the term of this permit.

B. Permittee shall submit compliance certifications pursuant to Section VII of Attachment "A".

- C. In addition, Permittee shall submit the following information pertaining to the GE Frame 3 regenerative natural gas fired turbine:

1. Dates of operation for the period specified in Section VII of Attachment "A".

This information shall be reported until such time when the fifteen cumulative days are triggered for conducting the performance test.

2. Until a performance test pursuant to Section IV.A. of this Attachment is completed, Permittee shall report the status of the testing requirements.

IV. TESTING REQUIREMENTS

[40 CFR 60.8, 40 CFR 60.335]

A. General Electric Frame 3 Regenerative Gas Turbine

Permittee shall conduct a set of performance tests on this turbine. Performance tests shall be performed when the turbine is operated beyond fifteen cumulative days. This performance test shall be completed within six months prior to this permit expiration. The test shall include all of the pollutants listed in Section IV.C. of this Attachment.

B. Solar Centaur H Simple Cycle Natural Gas Turbine Engine

1. Permittee shall conduct annual performance test on this turbine to determine emissions of nitrogen oxides in accordance with the requirements of 40 CFR 60.335. Test method specified in section IV.C. of this Attachment shall be used.
2. Permittee shall also conduct a performance test to determine emissions of carbon monoxide once during the first annual test. Test method specified in section IV.C. of this Attachment shall be used.

C. Test Methods

Permittee shall use the following EPA approved Reference test methods to conduct performance tests for pollutants specified:

1. Nitrogen Oxides. EPA Reference Method 20.
2. Carbon Monoxide. EPA Reference Method 10.

Except for emissions testing required under Article 9 or Article 11, Permittee may submit an alternate and equivalent test method(s) to the Director in any test plan for approval by the Director.

ATTACHMENT "C": APPLICABLE REGULATIONS

Air Quality Control Permit No. 1000159

For

EL PASO NATURAL GAS COMPANY - Wenden Compressor Station

ARIZONA ADMINISTRATIVE CODE (A.A.C.), TITLE 8, CHAPTER 2

REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE:

Compliance with the terms contained in this permit shall be deemed compliance with the following federally applicable requirements:

ARTICLE 6: EMISSIONS FROM EXISTING AND NEW NONPOINT SOURCES

- R18-2-601 General
- R18-2-602 Unlawful open burning
- R18-2-604 Open areas, dry washes, or riverbeds
- R18-2-605 Roadways and streets
- R18-2-607 Storage piles
- R18-2-610 Evaluation of nonpoint source emissions

ARTICLE 7: EMISSIONS FROM EXISTING AND NEW NONPOINT SOURCES

- R18-2-702.B General provisions
- R18-2-710.C.1 Standards of performance for existing storage vessels for petroleum liquids
- R18-2-719.E Standards of performance for existing stationary rotating machinery
- R18-2-724 Standards of performance for fossil-fuel fired industrial and commercial equipment
- R18-2-726 Standards of performance for sandblasting operations
- R18-2-727 Standards of performance for spray painting operations
- SIP R9-2-527.C Standards of performance for spray painting operations

ARTICLE 8: EMISSIONS FROM MOBILE SOURCES (NEW AND EXISTING)

- R18-2-801 Classification of mobile sources
- R18-2-802 Off-road machinery
- R18-2-804 Roadway and site cleaning machinery

ARTICLE 9: NEW SOURCE PERFORMANCE STANDARDS

- R18-2-902 General Provisions

ARTICLE 11: FEDERAL HAZARDOUS AIR POLLUTANTS

- R18-2-1101.A.8 National Emission Standards for Hazardous Air Pollutants (NESHAPs), (by reference) 40 CFR 61, Subpart M - Asbestos

CODE OF FEDERAL REGULATIONS, TITLE 40, PART 60

- Subpart GG Standards of Performance For Stationary Gas Turbines

REQUIREMENTS SPECIFICALLY IDENTIFIED AS NOT APPLICABLE

As requested by the Permittee, specific non-applicable requirements have been identified as follows. A permit shield is granted from these requirements.

- R18-2-703 Standards of Performance for Existing Fossil-Fuel Fired Steam Generators and General Fuel-Burning Equipment

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R18-724 Standards of Performance for Fossil-Fuel Fired Industrial and Commercial Equipment.

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ATTACHMENT "D": EQUIPMENT LIST

Air Quality Control Permit No. 1000159

For

El Paso Natural Gas Company - Wenden Compressor Station

PERMITTED EQUIPMENT						
Emission Unit I.D.	Equipment I.D	Description	Size*	Serial Number	Model	Date of Manufacture / Installation
P1	Engine A-1	Regenerative natural gas-fired turbine engine	8,500 hp	179180	GE M3102F	1967
P2	Engine A-2	Simple Cycle natural gas-fired turbine engine	4,500 hp	0291H	Solar Centaur H	1990
F1	Misc	Non-point Sources	-	-	-	-
F2	Misc	Abrasive Sandblasting	-	-	-	-
F3	Misc	Spray Painting	-	-	-	-
F4	Misc	Mobile Sources	-	-	-	-
F5	Misc	Demolition/ Renovation	-	-	-	

*Site horsepower(hp) @ 80°F

Site Elevation is approximately 6956 feet

ATTACHMENT "E": INSIGNIFICANT ACTIVITIES
 Air Quality Control Permit No. 1000159
 For
El Paso Natural Gas Company - Wenden Compressor Station

POTENTIAL EMISSION POINTS CLASSIFIED AS "INSIGNIFICANT ACTIVITIES" PURSUANT TO A.A.C. R18-2-101.54	
No.	Description
1	Internal combustion (IC) engine-driven compressors, IC engine-driven electrical generator sets used only for emergency replacement or standby service. Waukesha Emergency Generator 250 hp, Model Number F18GL.
2	Petroleum-based solvent tanks less than 10,000 gallons (solvent with a vapor pressure less than gasoline.)
3	Lube oil storage tanks.
4	Minor natural gas-fired appliances, in the aggregate rated less than 500,000 BTU/hr (such as hot water heaters, HVAC, etc.)
5	Temporary hydrostatic test water evaporation ponds.
6	Pressure tanks.
7	Used oil systems.
8	General maintenance of regulated emissions units, including, but not limited to, oil filter replacement (including drainage of oil filters), and work on the engine jacket water system.
9	Fan systems.
10	Maintenance and use of inertial separators (to filter air intake into the gas turbine engines.)
11	Exercise of standby equipment.
12	Domestic wastewater systems.
13	Plant water and wastewater system.
14	Emergency shut down system and pressure relief valves.
15	Blowdown activities.
16	Scrubber liquid systems.
17	Oil/water separator system.
18	Cathodic protection system.
19	Vents, valves, and flanges.
20	Solvent degreasing.
21	Cooling water systems.
22	General plant maintenance, construction, and upkeep activities not associated with the Permittee's primary business activity, and not otherwise triggering a permit modification.
23	Manually operated equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or turning of precision parts, leather, metals, plastics, fiber board, masonry, carbon, glass, or wood .
24	Use of consumer office products.
25	Use and maintenance of electric driven equipment for general location maintenance including but not limited to a bench grinder, drill press, pipe threader, and lathe.

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POTENTIAL EMISSION POINTS CLASSIFIED AS "INSIGNIFICANT ACTIVITIES" PURSUANT TO A.A.C. R18-2-101.54	
No.	Description
26	Steam cleaning activities.
27	Welding activities.
28	Laboratory equipment.
29	Safety equipment.
30	Uninterruptable power supply systems.
31	Utility pumps and systems.
32	Use of chlorination systems.
33	Routine start ups and shut downs